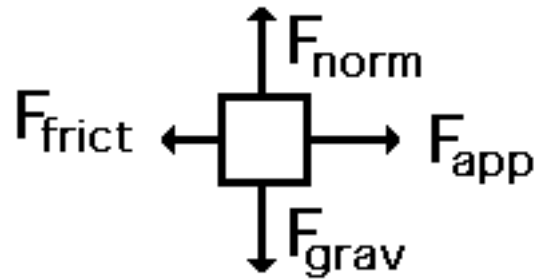
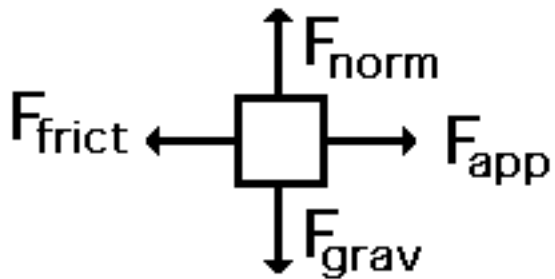


5. A rightward force is applied to a book in order to move it across a desk with a rightward acceleration. Consider frictional forces. Neglect air resistance. A free-body diagram for this situation looks like this:



6. A rightward force is applied to a book in order to move it across a desk at constant velocity. Consider frictional forces. Neglect air resistance. A free-body diagram for this situation looks like this:



7. A physics student rests a backpack upon his shoulder. The pack is suspended motionless by one strap from one shoulder. A free-body diagram for this situation looks like this:

